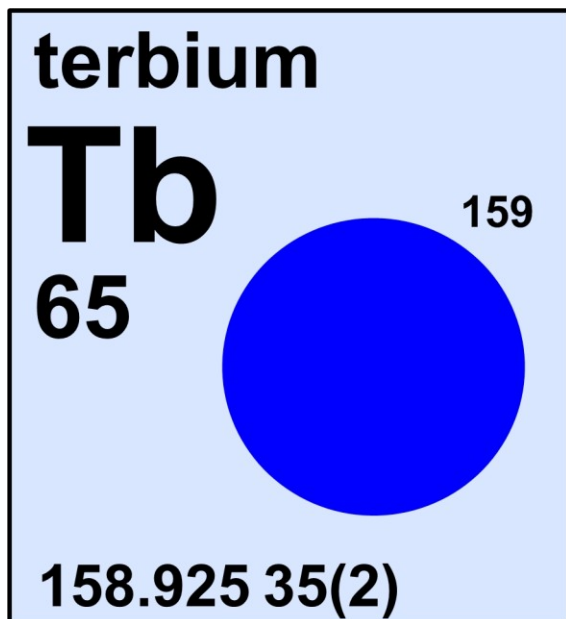


## terbium

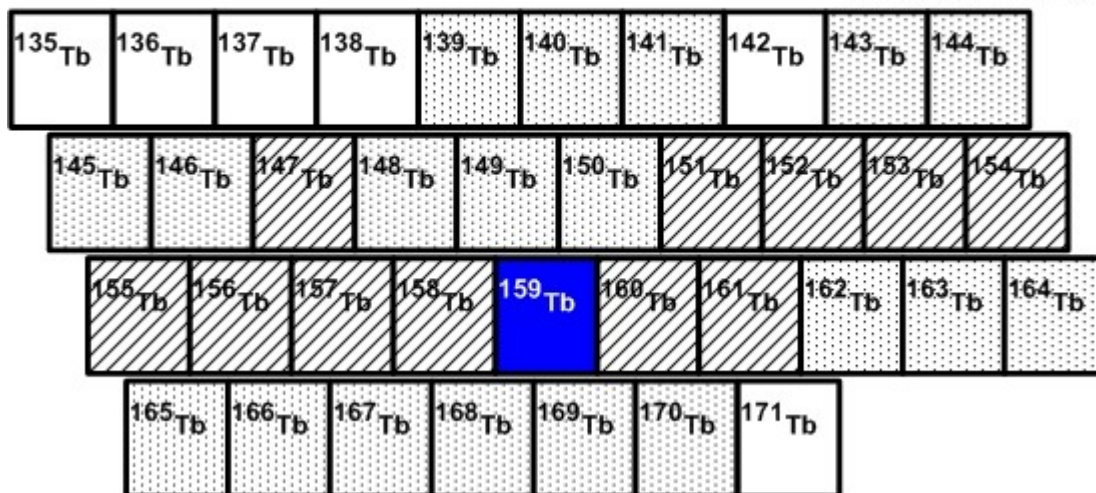


Stable isotope	Atomic mass*	Mole fraction
<sup>159</sup> Tb	158.925 3468	1.0000

\* Atomic mass given in unified atomic mass units, u.

### Half-life of radioactive isotope

Less than 1 second  
Between 1 second and 1 hour  
Greater than 1 hour



## Important applications of stable and/or radioactive isotopes

### Isotopes in medicine

- 1) <sup>149</sup>Tb is being studied for use in targeted  $\alpha$ -therapy and labeling radioimmunoconjugates in cancer treatments.

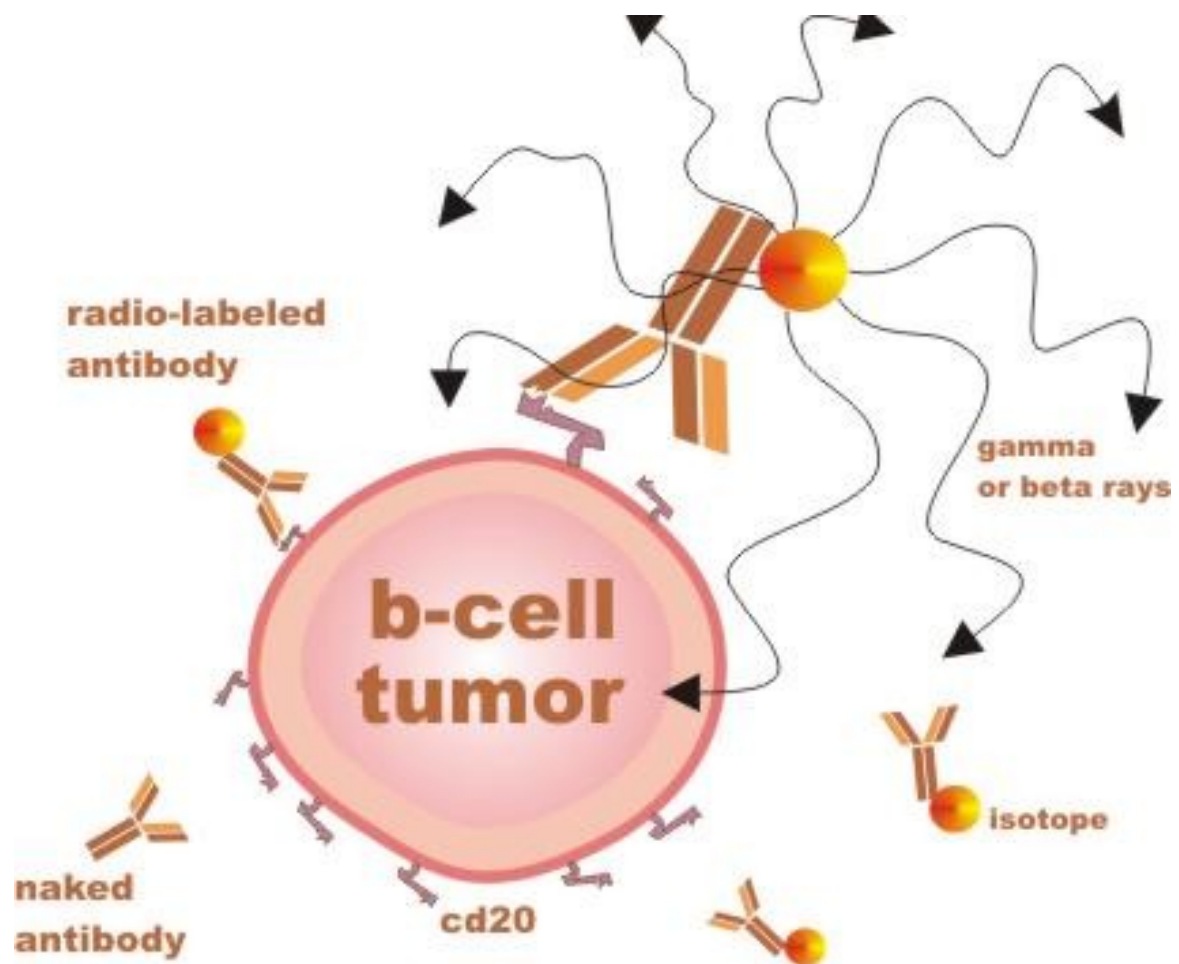


Figure 1: Radio-immunotherapy working against a timorous cell. Manmade antibodies laced with specific radioisotopes are created to target and deteriorate cancerous cells.